

**Amendments to the Claims:**

The listing of claims will replace all prior versions and listings of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A process monitor for monitoring a process in a process chamber by a sensor wafer having a sensor formed on a semiconductor wafer, comprising a capacitor on the sensor wafer as a power supply and a ROM for storing a keyword, wherein the capacitor is made with material that does not contaminate the process chamber.

2. (Original) A process monitor according Claim 1, further comprising a memory to store measured data obtained by the monitoring.

3. (Original) A process monitor according to Claim 1, further comprising a timer which is used to specify a measuring time and a measuring period.

4. (Cancelled)

5. (Original) A process monitor according to Claim 1, wherein said capacitor is formed by stacking a poly-silicon layer and a silicon nitride layer on said semiconductor wafer.

6. (Original) A semiconductor manufacturing apparatus having the process monitor of Claim 1, comprising a process monitor housing unit to store said process monitor.

7. (Original) A semiconductor manufacturing apparatus having the process monitor of Claim 1, comprising a charging unit to charge said capacitor, which is the power supply of the process monitor.

8. (Original) A semiconductor manufacturing apparatus having the process monitor of Claim 2, comprising a reader/writer to read and write the measured data stored in said memory.

9. (Original) A semiconductor manufacturing apparatus according to Claim 8, comprising a control unit which compares the measured data read by said reader/writer with predetermined reference data and controls the manufacturing process in predetermined way, if the measured data exceeds a predetermined range of the reference data.

10. (New) A process monitor according to Claim 1, further comprising a controller.

11. (New) A process monitor for monitoring a process in a process chamber by a sensor wafer having a sensor formed on a semiconductor wafer, comprising a pair of capacitors on the sensor wafer as a power supply and a ROM for storing a keyword, wherein the capacitors are made with material that does not contaminate the process chamber.

12. (New) A process monitor according to Claim 11, wherein the capacitors are connected in series.

13. (New) A process monitor according to Claim 11, wherein the capacitors are connected in parallel.